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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/695,715	10/29/2003	Mark T. Marshall	P-20009.00	5591
27581	7590	07/15/2004	EXAMINER	
MEDTRONIC, INC. 710 MEDTRONIC PARKWAY NE MS-LC340 MINNEAPOLIS, MN 55432-5604			ESTRADA, ANGEL R	
			ART UNIT	PAPER NUMBER
			2831	

DATE MAILED: 07/15/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/695,715

Applicant(s)

MARSHALL ET AL.

Examiner

Angel R. Estrada

Art Unit

2831

aw

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 24 June 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-40 is/are pending in the application.
- 4a) Of the above claim(s) 18-40 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-4, 9, 10, 13, 15 and 16 is/are rejected.
- 7) ☒ Claim(s) 5-8, 11, 12, 14 and 17 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 4, 13 and 15 are rejected under 35 U.S.C. 102(b) as being anticipated by Stevenson et al (US 4,424,551, hereinafter Stevenson).

Regarding claim 1, Stevenson discloses an implantable component including a feedthrough assembly (see figures 1-6), the feedthrough assembly (8) comprising: an insulator (14) electrically isolating a terminal pin (12) from a ferrule (10), the terminal pin (12) extending through the ferrule (10); an insulator-to-ferrule interface (see figure 6); an insulator-to-terminal pin interface (see figure 6); and a backfill (34) deposited over the insulator (14) and including a coating (36) forming a fluid barrier over the insulator (10), the insulator-to-ferrule interface and the insulator-to-terminal pin interface (see figure 6)

Regarding claim 4, Stevenson discloses the component, wherein the coating (36) comprises a material selected from the group consisting of silicones, polyimides, and fluorosilicones (column 5 lines 18-29).

Regarding claim 13, Stevenson discloses the component, wherein the coating (36) contacts a top surface of the ferrule (see figure 4).

Art Unit: 2831

Regarding claim 15, Stevenson discloses the component, wherein the insulator (14) is formed of a glass material (column 4 line 1-2).

Claim Rejections - 35 USC § 103

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2, 3, 9 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Stevenson et al (US 4,424,551, hereinafter Stevenson).

Regarding claim 2, Stevenson discloses the claimed invention except for the coating having a maximum thickness approximately less than or equal to 0.01 inch. It would have been obvious to one having ordinary skill in the art at

Art Unit: 2831

the time the invention was made to make the coating with a maximum thickness approximately less than or equal to 0.01 inch, since it has been held that discovering an optimum value of a result effective variable involves only routine skill in the art. In re Boesch, 617 F.2d 272, 205 USPQ 215 (CCPA 1980).

Regarding claim 3, Stevenson discloses the claimed invention except for the coating maximum thickness being between approximately 0.0001 inch and approximately 0.005 inch. It would have been obvious to one having ordinary skill in the art at the time the invention was made to make the coating with a maximum thickness being between approximately 0.0001 inch and approximately 0.005 inch, since it has been held that where the general conditions of a claim are disclosed in the prior art, discovering the optimum or workable ranges involves only routine skill in the art. In re Aller, 105 USPQ 2.

Regarding claim 9, Stevenson discloses the claimed invention except for the backfill further including at least one more coating formed over the coating. It would have been obvious to one having ordinary skill in the art at the time the invention was made to add at least one more coating over the first coating, since it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. St. Regis Paper Co. v. Bemis Co., 3 USPQ 8.

Regarding claim 10, Stevenson discloses the claimed invention except for the backfill further including at least one more coating formed over the coating. It would have been obvious to one having ordinary skill in the art at the time the invention was made to add at least one more coating over the first coating, since

Art Unit: 2831

it has been held that mere duplication of the essential working parts of a device involves only routine skill in the art. *St. Regis Paper Co. v. Bemis Co.*, 3 USPQ 8.

3 Claim 16 is rejected under 35 U.S.C. 103(a) as being unpatentable over Stevenson et al (US 4,424,551, hereinafter Stevenson'551) in view of Stevenson et al (US 6,275,369, hereinafter Stevenson'369).

Regarding claim 16, Stevenson'551 discloses the claimed invention except for the insulator being formed of a ceramic material. Stevenson '369 teaches a feedthrough having an insulator (60) formed of a ceramic material (column 6 line 28-32). It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the insulator of a ceramic material as taught by Stevenson'369 to provide an insulator with ceramic properties and without the transparency of glass, so it can be easily viewed.

Allowable Subject Matter

4. Claims 5-8, 11, 12, 14 and 17 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is an examiner's statement of reasons for allowance: The primary reasons for the indication of the allowability of claims 5-8, 11, 12, 14 and 17 are:

Art Unit: 2831

Regarding claim 5, the prior art does not disclose or teach in combination with the other claimed features the backfill having a layer of epoxy and the coating being located between the epoxy layer and the insulator.

Regarding claim 6, the prior art does not disclose or teach in combination with the other claimed features the backfill having a layer of epoxy and the epoxy layer being located between the coating and the insulator.

Regarding claim 7, the prior art does not disclose or teach in combination with the other claimed features the backfill having a layer of silicone and the coating being located between the silicone layer and the insulator.

Regarding claim 8, the prior art does not disclose or teach in combination with the other claimed features the backfill having a layer of silicone and the silicone layer being located between the coating and the insulator.

Regarding claim 11, the prior art does not disclose or teach in combination with the other claimed features the backfill having the backfill further includes a layer of epoxy and the epoxy layer being located between the coating and the at least one more coating.

Regarding claim 12, the prior art does not disclose or teach in combination with the other claimed features the backfill having a layer of silicone and the silicone layer being located between the coating and the at least one more coating.

Regarding claim 14, the prior art does not disclose or teach in combination with the other claimed features the component having a coating that contacts the insulator.

Regarding claim 17, the prior art does not disclose or teach in combination with the other claimed features a braze material at the insulator-to-ferrule interface and at the insulator-to-terminal pin interface and wherein the coating contacts the braze material at one or both of the interfaces.

These limitations are found in claims 5-8, 11, 12, 14 and 17, and are neither disclosed nor taught by the prior art of record, alone or in combination.

Response to Arguments

5. Applicant's arguments filed on June 24, 2004 have been fully considered but they are not persuasive.

In response to applicants' arguments that Stevenson et al (US 4,424,551) does not disclose a coating forming a fluid barrier and that the item 36, identified by the Examiner as a coating, is not described by Stevenson as a coating but rather as an electrically conductive solidifiable fluidic connecting material. The Examiner disagrees and points out that item 36 is a paste of uncured thermosetting non conductive material, such as polyimide (column 5 lines 25-26), with electrically conductive particles. Item 36 is formed mainly by a plastic material, which has a hardness property (see the table on column 5), that will form a barrier due to its hardness. It is well known in the art that plastics material or any material with a hardness, such as item 36, can provide a barrier against fluids, whether is a gas or a liquid.

Art Unit: 2831

Conclusion


6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7 Any inquiry concerning this communication should be directed to Angel R. Estrada at telephone number (571) 272-1973. The Examiner can normally be reached on Monday-Friday (8:30 -5:00).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Dean Reichard can be reached on (571) 272-2800 Ext: 31. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.


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